

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A fixing device comprising:
 - a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:
 - a first heater for heating a central region of the heating roller; and
 - a second heater for heating a side end ~~region~~ regions of the heating roller on an ~~outside~~ both sides of the central region,
 - wherein a peak of heat distribution of the first heater is located at or near a side end of an image region; and
 - wherein the first heater comprises has a coil filament filaments operable to emit light of a first amount and a wire filament filaments which are provided alternately in the central region and further comprises has a holding portion filament filaments which are coil filaments operable to emit light of a second amount less than a first amount and which are provided on the outside of the image region.
2. (original): The fixing device according to claim 1, wherein the peak of heat distribution of the first heater is located on an outside of the side end of the image region.

3. (canceled).
4. (currently amended): A fixing device comprising:
 - a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:
 - a first heater for heating a central region of the heating roller; and
 - a second heater for heating ~~a-side end-region~~ regions of the heating roller on ~~an outside~~ both sides of the central region,
 - wherein a peak of heat distribution of the first heater and a peak of heat distribution of the second heater are overlapped; and
 - ~~wherein a heat distribution obtained by the overlap of the first heater and the second heater includes peaks at opposite side ends of a maximum image region~~ the second heater comprises coil filaments operable to emit light of a first amount and wire filaments which are provided alternately in the side end regions, and further comprises holding portion filaments which are coil filaments operable to emit light of a second amount less than the first amount and which are provided in the central region; and
 - wherein the peak of heat distribution of the second heater is generated by the coil filaments.
5. (canceled).

6. (currently amended): The fixing device according to ~~claim 5~~claim 4, wherein a plurality of the coil filaments are provided on the second heater in each of the side end ~~region~~regions, and a length of one of the coil filaments located on an outer side is greater than a length of another one of the coil filaments located on an inner side.

7. (currently amended): The fixing device according to ~~claim 1~~claim 4, wherein a temperature sensor is provided near at least one end of the heating roller where the peak of heat distribution of the first heater is located.

8. (currently amended): The fixing device according to ~~claim 1~~claim 4, wherein a temperature sensor is provided in a central part of the heating roller.

9. (currently amended): A fixing device comprising:
a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:
a first heater for heating a central region of the heating roller; and
a second heater for heating a-side end ~~region~~regions of the heating roller on an ~~outside~~both sides of the central region,
wherein a temperature sensor for detecting a temperature of the heating roller is provided on a non-overlapping portion where a heating portion of the first heater and a holding portion of the second heater are not overlapped.

10. (original): The fixing device according to claim 9, wherein the temperature sensor is provided at a portion on the heating portion in the non-overlapping portion.

11. (original): The fixing device according to claim 9, wherein the temperature sensor is provided in a central part of the heating roller.

12. (currently amended): A fixing device comprising:
a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:
a first heater for heating a central region of the heating roller; and
a second heater for heating ~~a-side end~~ region-regions of the heating roller on ~~an~~ outside-both sides of the central region,
wherein a temperature sensor for detecting a temperature of the heating roller is provided on an overlapping portion where a heating portion of the first heater and a holding portion of the second heater are overlapped.

13. (original): The fixing device according to claim 12, wherein the temperature sensor is provided on the heating portion of the second heater in the overlapping portion.

14. (original): The fixing device according to claim 12, wherein the temperature sensor is provided on an end of the heating roller.

15. (currently amended): The fixing device according to claim 9, wherein the first heater includes ~~the central region in which a~~ the heating portion opposing the central region and formed by at least one coil filament filaments operable to emit light of a first amount and at least one wire filament filaments which are arranged alternately, and ~~the side end region in which a holding portion~~ portions opposing the side end regions and formed by at least one holding portion filament and at least one wire filament are arranged alternately arranging the wire filaments and holding portion filaments, the holding portion filaments being coil filaments operable to emit light of a second amount less than the first amount.

16. (currently amended): The fixing device according to ~~claim 9~~ claim 15, wherein the second heater includes heating portions opposing the side end regions and formed by coil filaments operable to emit light of a first amount and wire filaments which are arranged alternately and the central region in which a holding portion opposing the central region and formed by at least one holding portion filament and at least one wire filament are arranged alternately, arranging the wire filaments and holding portion filaments, the holding portion filaments being coil filaments operable to emit light of a second amount less than the first amount, and the side end region in which a heating portion formed by at least one coil filament and at least wire filament are arranged alternately.

17. (currently amended): The fixing device according to claim 16, wherein a plurality of the coil filaments are provided in each of the side end ~~region~~regions, and a length of one of the coil filaments located on an outer side is greater than a length of another one of the coil filaments located on an inner side.

18. (currently amended): The fixing device according to claim 16, wherein phases of the alternate arrangement of the holding portion filament-filaments and the second wire filament filaments and that of the coil filament-filaments and the first wire filament-filaments are shifted from each other.

19. (currently amended): The fixing device according to claim 9, wherein a peak of heat distribution of the first heater and a peak of heat distribution of the second heater are overlapped in the side end ~~region~~regions.

20. (currently amended): A fixing device comprising:
a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:
a first heater for heating a central region of the heating roller; and
a second heater for heating a-side end ~~region~~regions of the heating roller on ~~an~~ outside-both sides of the central region,

wherein first coil filaments operable to emit light of a first amount and first wire filaments are alternately provided in the first heater at the central region ~~at least one holding filament and at least one wire filament are provided in the second heater~~ with phases alternated with phases of second wire filaments and first holding portion filaments ~~at least one coil filament and at least one wire filament~~ which are provided in the ~~first~~ second heater alternately ~~in~~ at the central region; and

wherein the first holding portion filaments are coil filaments operable to emit light of a second amount less than the first amount.

21. (currently amended): A fixing device comprising:

a heating roller brought into pressure contact with a pressurizing roller, the heating roller comprising:

a first heater for heating a central region of the heating roller; and

a second heater for heating ~~a-side end~~ region-regions of the heating roller on an ~~outside~~ both sides of the central region,

wherein the first heater has first coil elements operable to emit light of a first amount and wire filaments which are alternately arranged so as to oppose the central region;

wherein the second heater comprises at least one first holding filament-portion filaments which are coil filaments operable to emit light of a second amount less than the first amount ~~of the second heater provided in the central region is provided in a position~~

~~corresponding to at least one~~so as to oppose the wire filament-filaments of the first heater ~~in the central region.~~

22. (original): The fixing device according to claim 20, wherein a peak of heat distribution of the first heater and a peak of heat distribution of the second heater are overlapped in the side end region.

23. (currently amended): The fixing device according to ~~claim 20~~claim 22, wherein the first heater has a second holding portion filament-filaments, which are coil filaments operable to emit light of an amount less than the first amount and which oppose ~~provided in the side end regionregions, and the peak of heat distribution in the first heater is generated by the holding portion filament.~~

24. (currently amended): The fixing device according to ~~claim 20~~claim 22, wherein the second heater has at least one second coil filament-filaments operable to emit light of an amount greater than the second amount and which oppose ~~and at least one wire filament provided alternately in the side end regionregions, and the peak of heat distribution in the second heater is generated by the coil filament.~~

25. (currently amended): The fixing device according to claim 24, wherein a plurality of the second coil filaments are provided on the second heater in each of the side end

~~region~~regions, and a length of one of the second coil filaments located on an outer side is greater than a length of another one of the second coil filaments located on an inner side.

26. (original): An image forming apparatus comprising the fixing device according to claim 1.

27. (new) The fixing device according to claim 12, wherein the first heater includes the heating portion opposing the central region and formed by coil filaments operable to emit light of a first amount and wire filaments which are arranged alternately, and holding portions opposing the side end regions and formed by alternately arranging the wire filaments and holding portion filaments which are coil filaments operable to emit light of a second amount less than the first amount.

28. (new) The fixing device according to claim 27, wherein the second heater includes heating portions opposing the side end regions and formed by coil filaments operable to emit light of a first amount and wire filaments which are arranged alternately and the holding portion opposing the central region and formed by arranging the wire filaments and holding portion filaments which are coil filaments operable to emit light of a second amount less than the first amount.

29. (new) The fixing device according to claim 28, wherein phases of the alternate arrangement of the holding portion filaments and the second wire filaments and that of the coil filaments and the first wire filaments are shifted from each other.

30. (new) An image forming apparatus comprising the fixing device according to claim 4.

31. (new) An image forming apparatus comprising the fixing device according to claim 9.

32. (new) An image forming apparatus comprising the fixing device according to claim 12.

33. (new) An image forming apparatus comprising the fixing device according to claim 20.

34. (new) An image forming apparatus comprising the fixing device according to claim 21.